

Si Photo-diode Chip—TK0N43PDN

1. Scope

- The specification applies to PIN silicon photo-diode chips.
- Type : TK0N43PDN.

2. Structure

- PIN planar type.
- Electrode topside (Cathode) : Aluminum.
- Electrode backside (Anode) : Gold alloy.

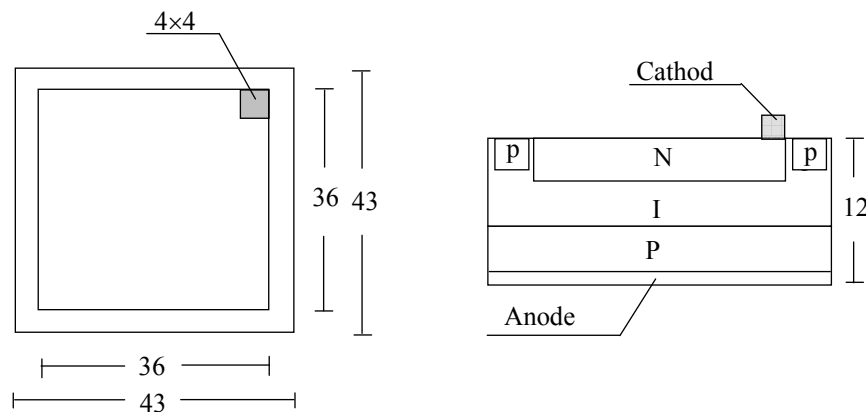
3. Size

- Chip size : $43\text{mil} \times 43\text{mil} \pm 0.500\text{mil}$ ($1.09\text{mm} \times 1.090\text{mm} \pm 0.013\text{mm}$)
- Thickness : $12\text{mil} \pm 1\text{mil}$ ($0.300\text{mm} \pm 0.025\text{mm}$)
- Active area : $36\text{mil} \times 36\text{mil}$ ($0.910\text{mm} \times 0.910\text{mm}$)
- Pattern drawing : per fig. 1

4. Electro-Optical Characteristics

($T_a = +25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit.
Forward Voltage	V_F	$I_F=10\text{mA}$, $H=0$	0.5		1.3	V
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$, $H=0$	35			V
Reverse Dark Current	I_D	$V_R=10\text{V}$, $H=0$			10	nA
Light Current	I_L	$V_R=5\text{V}$, H as 1mw/cm^2 @940nm		3.2		μA
Peak Sensing Wavelength	λ_p			940		nm
Junction Capacitance	C_J	$V_R=3\text{V}$, $F=1\text{MHz}$		4.9		pF



Unit : mil

fig. 1

2012.May



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